(FILE 'HOME' ENTERED AT 13:55:18 ON 14 JUL 2003)

FILE 'MEDLINE, BIOTECHDS, EMBASE, CANCERLIT, BIOSIS, CAPLUS' ENTERED AT 13:56:37 ON 14 JUL 2003

| | | | |
|---|---|---|---|
| L1 | 584601 | S | ACRY? OR METHACRY? |
| L2 | 16477 | S | MICROPARTICLE OR DNA VACCINE |
| L3 | 984 | S | L2 AND L1 |
| L4 | 6 | S | L3 AND DNA VACCINE |
| L5 | 6 | DUP REM | L4 (0 DUPLICATES REMOVED) |
| L6 | 587 | S | L1 AND ADJUVANT |
| L7 | 412 | DUP REM | L6 (175 DUPLICATES REMOVED) |
| L8 | 62304 | S | MALEIC ANHYDRIDE |
| L9 | 18 | S | L8 AND L7 |
| L10 | 2155479 | S | ANTIGE? OR IMMUNOGEN? OR VACCINE |
| L11 | 351 | S | L10 AND L8 |
| L12 | 42 | S | L11 AND L1 |
| L13 | 39 | DUP REM | L12 (3 DUPLICATES REMOVED) |
| L14 | 2 | S | L8 AND DNA VACCINE |
| L15 | 5042298 | S | DNA OR NUCLEIC OR GENE OR PLASMID |
| L16 | 9419 | S | L15 AND L1 |
| L17 | 48 | S | L16 AND L8 |
| L18 | 46 | DUP REM | L17 (2 DUPLICATES REMOVED) |
| L19 | 302 | S | L1 AND INTERFERON |
| L20 | 46 | S | L19 AND L10 |
| L21 | 27 | DUP REM | L20 (19 DUPLICATES REMOVED) |
| L22 | 2340 | S | AUJESZKY |
| L23 | 898 | S | L22 AND L10 |
| L24 | 658 | S | L22 AND VACCINE |
| L25 | 172 | S | L24 AND L15 |
| L26 | 15 | S | L25 AND PROTECTIVE |
| L27 | 8 | DUP REM | L26 (7 DUPLICATES REMOVED) |
| L28 | 1732 | S | PORCINE REPRODUCT? AND VIRUS |
| L29 | 331 | S | L28 AND VACCINE |
| L30 | 162 | S | L29 AND PROTE? |
| L31 | 162 | S | L30 AND RESPIRATORY |
| L32 | 0 | S | PORCINE PARVOVIROSIS VIRUS AND VACCINE |
| L33 | 0 | S | PORCINE PARVOVIROSIS VIRUS |
| L34 | 893 | S | PORCINE PARVOVI? |
| L35 | 155 | S | L34 AND VACCINE |
| L36 | 8 | S | L35 AND PROTECTIVE |
| L37 | 1180 | S | HOG CHOLERA VIRUS |
| L38 | 19 | S | L37 AND VACCINE AND PROTECTIVE |
| L39 | 12 | DUP REM | L38 (7 DUPLICATES REMOVED) |
| L40 | 10703 | S | ACTINOBACILLUS |
| L41 | 112 | S | L40 AND VACCINE AND PROTECTIVE |
| L42 | 47 | S | L41 AND ANTIGEN |
| L43 | 25 | DUP REM | L42 (22 DUPLICATES REMOVED) |
| L44 | 0 | S | EQUINE RHINOPNEMONIA |
| L45 | 370 | S | RHINOPN? |
| L46 | 277 | S | L45 AND EQUINE |
| L47 | 43 | S | L46 AND VACCINE |
| L48 | 4 | S | L47 AND PROTECTIVE |
| L49 | 124 | S | CL TETANI |
| L50 | 2 | S | L49 AND VACCINE AND PROTECTIVE |
| L51 | 4 | S | L49 AND ANTIGEN |
| L52 | 0 | S | ECENPHALITIS AND ANTIGEN |
| L53 | 5261 | S | ENCEPHALITIS AND ANTIGEN |
| L54 | 638 | S | L53 AND VACCINE |
| L55 | 177 | S | L54 AND PROTECTI? |
| L56 | 3068 | S | CANINE DISTEMPER |
| L57 | 533 | S | L56 AND ANTIGEN |

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L58          49 S L57 AND PROTECT?
L59          26 DUP REM L58 (23 DUPLICATES REMOVED)
L60           0 S CANINE CORNOAVIRUS
L61           1 S CORNOAVIRUS
L62        9598 S CORN? AND VIRUS
L63          46 S L62 AND CANINE
L64           7 S L63 AND VACCINE
L65          73 S BOVINE PESTIVIRUS
L66          10 S L65 AND VACCINE
L67           2 S L66 AND ANTIGEN
L68           0 S L65 AND IMMUNOGENE
L69           0 S L65 AND IMMUNOGEN
L70          12 S L65 AND ANTIGEN
L71           6 S L65 AND PROTEC?
L72         343 S PESTIVIRUS AND VACCIN?
L73          58 S L72 AND ANTIGEN
L74        5496 S FELINE LEUK? VIRUS
L75           0 S L74 AND VACCIEN AND PROTECTIVE
L76         163 S L74 AND VACCINE AND ANTIGEN
L77          27 S L76 AND PROTECTIVE
L78          16 DUP REM L77 (11 DUPLICATES REMOVED)
L79           7 S FELINE PANLEUKOPAENIA VIRUS
L80           0 S L79 AND ANTIGEN
L81         622 S FELINE AND PANLEU? VIRUS
L82          27 S L81 AND ANTIGEN AND VACCINE
L83          17 S FELINE AND PARI? AND VIRUS
L84           1 S L83 AND VACCINE
L85           3 S PARITONITIS
L86       74446 S PARIT?
L87         921 S L86 AND VIRUS
L88           1 S L87 AND VACCINE AND ANTIGEN
L89           0 S PARIT? VIRUS
L90          40 S TONGUE AND VIRUS AND FELINE
L91           1 S L90 AND VACCINE
L92           0 S TONI? VIRUS
L93       15778 S FELINE AND VIRUS
L94          40 S L93 AND TONGUE
L95           1 S L94 AND VACCINE
L96          25 DUP REM L94 (15 DUPLICATES REMOVED)
L97           3 S PARITONITIS
L98       52581 S PERITONITIS
L99         966 S L98 AND FELINE AND VIRUS
L100        147 S L99 AND VACCINE
L101         39 S L100 AND ANTIGEN
L102          5 S L101 AND PROTECTIVE
L103        120 S CALIC? VIRUS
L104         48 S L103 AND FELINE
L105         33 S L104 AND VACCINE
L106          9 S L105 AND ANTIGEN
L107        481 S FIV AND VACCINE
L108        264 S L107 AND PROTECT?
L109        142 S GUMBORO AND VIRUS
L110         45 S L109 AND VACCINE
L111          1 S LARYNGOTHRA? AND VIRUS
L112        733 S LARY? VIRUS
L113        219 S L112 AND VACCINE
L114       5381 S AVIAN LEUKOSIS
L115       5016 S PNEUMOVIRUS
L116         18 S AVIAN  AND ANAEMIA VIRUS
L117          6 S L116 AND VACCINE

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L13 ANSWER 25 OF 39 MEDLINE DUPLICATE 2
AN 91363766 MEDLINE
DN 91363766 PubMed ID: 2103830
TI Polymer-metal complexes of protein **antigens**--new highly effective **immunogens**.
AU Mustafaev M I; Norimov A Sh
CS Institute of Immunology, Ministry of Health of the USSR, Moscow.
SO BIOMEDICAL SCIENCE, (1990 Mar) 1 (3) 274-8.
Journal code: 9010320. ISSN: 0955-9701.
CY ENGLAND: United Kingdom
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199110
ED Entered STN: 19911103
Last Updated on STN: 19970203
Entered Medline: 19911017
AB The mechanism of interaction of the copolymers N-vinylpyrrolidone-**acrylic** acid and N-vinylpyrrolidone-**maleic anhydride** with bovine serum albumin, influenza virus total surface **antigen** (haemagglutinin and neuraminidase), and the BCG protein fraction in the presence of divalent copper ions was investigated. Novel water-soluble triple polymer-metal complexes of the above protein **antigens** were formed. These complexes showed high **immunogenicity** and conferred high levels of immunological protection. Study of the replication of pathogenic influenza A virus in animal lungs showed that, in mice immunised with the triple complex containing surface glycoprotein influenza virus A **antigens**, reproduction of the homologous virus was sharply inhibited, and immunisation of B mice, exhibiting pronounced T-cell deficiency, with complexes containing the BCG protein fraction ensured development of a high level of protection with respect to BCG infection.

L13 ANSWER 19 OF 39 CAPLUS COPYRIGHT 2003 ACS
AN 1994:517757 CAPLUS
DN 121:117757
TI Synthesis of polymer bioactive conjugates
IN Marcucci, Fabrizio; Gregory, Ruth
PA Farmitalia Carlo Erba S.R.L., Italy
SO PCT Int. Appl., 44 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|---|
| PI | WO 9413322 | A1 | 19940623 | WO 1993-EP3429 | 19931206 |
| | W: AT, AU, BB, BG, BR, BY, CA, CH, CZ, DE, DK, ES, FI, GB, HU, JP, KP, KR, KZ, LK, LU, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SK, UA, US, VN | | | | |
| | RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | | |
| | CA 2150925 | AA | 19940623 | CA 1993-2150925 | 19931206 |
| | AU 9456968 | A1 | 19940704 | AU 1994-56968 | 19931206 |
| | AU 678796 | B2 | 19970612 | | |
| | EP 675736 | A1 | 19951011 | EP 1994-902692 | 19931206 |
| | EP 675736 | B1 | 19980715 | | |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE | | | | |
| | JP 08504202 | T2 | 19960507 | JP 1993-513763 | 19931206 |
| | AT 168273 | E | 19980815 | AT 1994-902692 | 19931206 |
| | ES 2121180 | T3 | 19981116 | ES 1994-902692 | 19931206 |
| | US 6172202 | B1 | 20010109 | US 1997-889049 | 19970707 |
| PRAI | GB 1992-25448 | A | 19921204 | | |
| | WO 1993-EP3429 | W | 19931206 | | |

AB A process for the prepn. of a conjugate between a polymer and a first substance having a biol. activity mediated by a domain consists of (a) contacting the first substance with a second substance which specifically binds to the domain of the first substance, (b) conjugating a polymer to the first substance having the second substance bound and (c) freeing the second substance from the first substance having the polymer conjugate. The advantages such as prolonged half-life in vivo and reduced **immunogenicity** in proteins, that can be derived from the conjugation of polymers to drugs or diagnostic reagents are maintained. Thus, a PEG_monoclonal antibody conjugates (mAb 78) lyophilized formulation was prepd. contg. drug 0.05-0.5, excipient such as lactose or mannitol 2.5-5.0, surfactant (e.g., Poloxamer) 0.0025-0.025% (wt./vol.) and 6.5-7 pH-adjusting agent. The conjugate displayed a better retention of biol. activity than the unprotected conjugates.

L18 ANSWER 42 OF 46 CAPLUS COPYRIGHT 2003 ACS
AN 1980:169270 CAPLUS
DN 92:169270
TI Bloodcompatible functional polymers
IN Sullivan, Thomas E.; Wright, Oscar L.
PA USA
SO U.S., 4 pp.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| PI US 4182750 | A | 19800108 | US 1977-789498 | 19770421 |
| PRAI US 1977-789498 | | 19770421 | | |

AB Blood compatible polymers for hemoperfusions were made by chem. bonding a base polymer formed by vinyl polymn. of styrene, vinyl chloride, **maleic anhydride**, **acrylic** acid derivs. or nitrilo substituted ethylene to a modified protein, carbohydrate, **nucleic** acid or a lipid. The polymers are capable of transferring a ingredient to blood, biol. fluid or tissue without producing undesirable side effects.

L18 ANSWER 12 OF 46 CAPLUS COPYRIGHT 2003 ACS
AN 2002:271978 CAPLUS
DN 136:299804
TI High efficiency local drug delivery using polymer-coated catheters
IN Palasis, Maria; Walsh, Kenneth
PA Scimed Life Systems, Inc., USA
SO U.S., 12 pp., Cont.-in-part of U.S. Ser. No. 106,855.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|---|
| PI | US 6369039 | B1 | 20020409 | US 1998-204254 | 19981203 |
| PRAI | US 1998-106855 | B2 | 19980630 | | |

AB A method of site-specific delivery of a therapeutic agent to a target location within a body cavity, vasculature or tissue is described. The method comprises the steps of providing a medical device having a substantially satd. soln. of therapeutic agent assocd. therewith; introducing the medical device into the body cavity, vasculature or tissue; releasing a vol. of the soln. of therapeutic agent from the medical device at the target location at a pressure of about 0-5 atm for a time of up to about 5 min; and withdrawing the medical device from the body cavity, vasculature or tissue. In another aspect, the present invention includes a system for delivering a therapeutic agent to a body cavity, vasculature or tissue, comprising a medical device having a substantially satd. soln. of the therapeutic agent assocd. therewith. For example, a delivery with a hydrogel-coated balloon catheter was carried out. Virus was applied to the hydrogel coating of angioplasty balloons by slowly applying 25 L of a 1.7x1011 pfu/mL adenoviral .beta.-galactosidase stock soln. (replication deficient adenovirus carrying the E coli .beta.-galactosidase **gene**) onto the coating using a micropipette. A 2.0 cm long, 3.0 mm diam. loaded hydrogel coated balloon catheter was placed within a protective sheath and inflated to 2 atm. The entire assembly was advanced over a 0.014 in guidewire via the right common carotid artery to the bifurcation leading to the external iliacs. The balloon was then deflated and quickly advanced further to either the right or left external iliac artery. Viral delivery was allowed to occur for either 2 or 30 min. A 2-min clin. relevant delivery time was shown to be effective in achieving high levels of **gene** transfection in vivo

L27 ANSWER 1 OF 8 MEDLINE DUPLICATE 1
AN 1999435201 MEDLINE
DN 99435201 PubMed ID: 10507367
TI Enhanced **protective** response and immuno-adjuvant effects of porcine GM-CSF on **DNA** vaccination of pigs against **Aujeszky**'s disease virus.
AU Somasundaram C; Takamatsu H; Andreoni C; Audonnet J C; Fischer L; Lefevre F; Charley B
CS Virologie et Immunologie moleculaires, INRA, Jouy en Josas, France.
SO VETERINARY IMMUNOLOGY AND IMMUNOPATHOLOGY, (1999 Sep 20) 70 (3-4) 277-87. Journal code: 8002006. ISSN: 0165-2427.
CY Netherlands
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199910
ED Entered STN: 20000111
Last Updated on STN: 20000111
Entered Medline: 19991026
AB This study was conducted to investigate whether the co-delivery of **DNA** encoding porcine cytokines would enhance a **protective** immune response in pigs to a Pseudorabies virus (PRV; or **Aujeszky**'s disease virus) **DNA vaccine**. **Aujeszky**'s disease in pigs results in respiratory and nervous symptoms with important economic losses. To evaluate cytokine effects, eukaryotic expression vectors were constructed for porcine GM-CSF, IL-2 and IFN-gamma. cDNA for each of these cytokines was inserted under the control of a CMV promoter in the pcDNA3 **plasmid** and cytokine expression was confirmed after **DNA** transfection in various mammalian cell cultures by bioassays (GM-CSF and IL2) and ELISA (IFN-gamma). Pigs were vaccinated by single intramuscular injection with **plasmid DNA** encoding PRV gB and gD along with various combinations of cytokine **plasmid** constructs. Pig serum was tested for the production of antibody by isotype specific anti-PRV ELISA. Pigs were then challenged with the highly virulent PRV strain NIA3 on day 21 after vaccination. The survival and growth rate of pigs were monitored for seven days after the viral challenge. The co-administration of GM-CSF **plasmid** increased the immune response induced by gB and gD PRV **DNA vaccine**. This immune response was characterized by an earlier appearance of anti-PRV IgG2, a significantly enhanced anti-PRV IgG1 and IgG2 antibody response, a significantly decreased and shortened viral excretion in nasal swabs and an improved protection to the viral challenge. In contrast, the co-administration of porcine IL-2 or IFN-gamma had no adjuvant effects. Our results thus demonstrate for the first time that the application of porcine GM-CSF **gene** in a **DNA vaccine** formulation can exert immuno-adjuvant and **protective** effects with single vaccination in the natural host pig against **Aujeszky**'s disease.

L31 ANSWER 1 OF 162 MEDLINE
AN 2003081173 MEDLINE
DN 22480811 PubMed ID: 12591204
TI Comparative safety and efficacy of attenuated single-strain and multi-strain vaccines for **porcine reproductive** and **respiratory** syndrome.
AU Mengeling William L; Lager Kelly M; Vorwald Ann C; Clouser Deborah F
CS Virus and Prion Diseases of Livestock Research Unit, National Animal Disease Center, PO Box 70, USDA, Agricultural Research Service, Ames, IA 50010, USA.. bbmengeling@aol.com
SO VETERINARY MICROBIOLOGY, (2003 May 2) 93 (1) 25-38.
Journal code: 7705469. ISSN: 0378-1135.
CY Netherlands
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 200306
ED Entered STN: 20030221
Last Updated on STN: 20030617
Entered Medline: 20030616
AB The objective of this study was to compare the efficacy and safety of single-strain and multi-strain vaccines for the prevention of the **respiratory** facet of **porcine reproductive** and **respiratory** syndrome. The study comprised six groups of pigs (A through F, eight pigs per group). At the beginning of the study (Day 0) Groups C and D were vaccinated with a single-strain **vaccine**, and Groups E and F were vaccinated with a multi-strain **vaccine**. The multi-strain **vaccine** contained five attenuated strains of PRRSV including the strain used as the single-strain **vaccine**. On Day 28 Groups B (nonvaccinated/challenged control), D, and F were challenged with a highly virulent field strain of PRRSV that was unrelated to any of the strains used for vaccination. Group A was kept as a nonvaccinated/nonchallenged control. On Day 42 all pigs were necropsied. Their lungs and lymph nodes were examined for **virus**-induced changes. Serum samples obtained at weekly intervals during the study and lung lavage fluids obtained at necropsy were tested for the presence and titer of PRRSV. Serum samples were also tested for antibody. The presence and severity of clinical signs and lesions were the primary means by which **vaccine** efficacy and safety were evaluated. Both vaccines provided a high level of **protective** immunity to challenge. However, appreciable lymph node enlargement in pigs vaccinated with multi-strain **vaccine**, with or without subsequent challenge, raised a question as to its safety. Collectively these results indicate that both single-strain and multi-strain attenuated PRRSV vaccines can be effective immunogens, but additional studies in regard to safety are needed before multi-strain vaccines can be recommended for routine field use.
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L36 ANSWER 5 OF 8 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
AN 1990:421725 BIOSIS
DN BA90:82526
TI DEVELOPMENT OF A **VACCINE** PREVENTING PARVOVIRUS-INDUCED REPRODUCTIVE FAILURE IN PIGS.
AU PYE D; BATES J; EDWARDS S J; HOLLINGWORTH J
CS COMMONWEALTH SERUM LAB., 45 POPLAR RD., PARKVILLE, VICTORIA 3052.
SO AUST VET J, (1990) 67 (5), 179-182.
CODEN: AUVJA2. ISSN: 0005-0423.
FS BA; OLD
LA English
AB An inactivated **porcine parvovirus** (PPV) **vaccine** for the prevention of PPV-induced reproductive failure in pigs was developed, using virus grown in cell culture, inactivated with beta-propiolactone and adjuvanted with aluminium hydroxide. The **vaccine** was tested for safety by subcutaneous injection into pregnant gilts. There were no signs of abnormal reactions nor evidence of PPV infection in the gilts or their foetuses when they were sacrificed 6 weeks after vaccination. To demonstrate that the **vaccine** was immunogenic, pigs were immunized either once or twice with 4 weeks between doses. Resulting antibody titres (haemagglutination inhibition - HAI) ranged from <8 to 64 (geometric mean of 30) after one dose of **vaccine**, and from 128 to 512 (geometric mean 256) after two doses. To demonstrate that the **vaccine** was **protective**, antibody-negative gilts were vaccinated twice, with 4 weeks between doses, joined after the second dose, and were then infected with virulent PPV 40 to 50 days after joining. In litters from 10 vaccinated gilts, none of 93 foetuses showed evidence of PPV infection. In contrast, in litters from two unvaccinated gilts, all 13 foetuses showed evidence of PPV infection and 10 of these were mummified. The average number of live piglets per litter was 9.2 from vaccinated gilts and 1.5 from unvaccinated gilts. The **vaccine** was therefore considered to be effective in preventing PPV reproductive failure in susceptible gilts.

L39 ANSWER 12 OF 12 BIOTECHDS COPYRIGHT 2003 THOMSON DERWENT AND ISI
AN 1991-02567 BIOTECHDS
TI Structural proteins of **hog cholera virus** expressed by vaccinia virus: further characterization and induction of **protective** immunity;
pig cholera virus structural protein expression in CV-1 cell culture; potential application to recombinant **vaccine** production
AU Ruemenapf T; Stark R; Meyers G; *Thiel H J
LO Federal Research Centre for Virus Diseases of Animals, P.O. Box 1149, D-7400 Tuebingen, Germany.
SO J.Virol.; (1991) 65, 2, 589-97
CODEN: JOVIAM
DT Journal
LA English
AB Expression and immunization studies using recombinant vaccinia virus (VV)/pig cholera virus (PCV) constructs (plasmid pGS62core and plasmid pGS62-3.8) that contained different cDNA fragments covering the coding regions for the structural proteins of PCV are presented. cDNA encoding the PCV proteins was inserted into a thymidine-kinase (EC-2.7.1.21) gene of VV. Expression led to the identification of PCV-specific proteins. The putative PCV core protein p23 was demonstrated using an antiserum against a bacterial fusion protein. The glycoproteins expressed by VV/PCV recombinants migrated on SDS gels identically to those precipitated from PCV-infected cells. A disulfide-linked heterodimer between gp55 and gp33, previously detected in PCV-infected cells, was also demonstrated after infection with the recombinant VV. The VV system allowed the identification of a disulfide-linked homodimer of PCV gp55. The VV/PCV recombinant that expressed all 4 structural proteins (VAC3.8) induced virus-neutralizing antibodies in mice and pigs. Immunization of pigs with this recombinant virus resulted in full protection against a lethal challenge with PCV. (43 ref)

L43 ANSWER 7 OF 25 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V.DUPLICATE 2
AN 2000175283 EMBASE
TI Intramuscular immunization with genetically inactivated (ghosts) **Actinobacillus** pleuropneumoniae serotype 9 protects pigs against homologous aerosol challenge and prevents carrier state.
AU Hensel A.; Huter V.; Katinger A.; Raza P.; Strnistschie C.; Roesler U.; Brand E.; Lubitz W.
CS A. Hensel, Inst. Animal Hygiene/Vet Public Hlth, Veterinary Faculty, University of Leipzig, D-04103 Leipzig, Germany. hensel@vetmed.uni-leipzig.de
SO Vaccine, (1 Jul 2000) 18/26 (2945-2955).
Refs: 50
ISSN: 0264-410X CODEN: VACCDE
PUI S 0264-410X(00)00107-9
CY United Kingdom
DT Journal; Article
FS 026 Immunology, Serology and Transplantation
037 Drug Literature Index
004 Microbiology
LA English
SL English
AB Bacterial ghosts are empty cell envelopes achieved by the expression of a cloned bacteriophage lysis gene and, unlike classical bacterins, suffer no denaturing steps during their production. These properties may lead to a superior presentation of surface antigens to the immune system. Currently available porcine **Actinobacillus** pleuropneumoniae vaccines afford only minimal protection by decreasing mortality but not morbidity. Pigs which survive infection can still be carriers of the pathogen, so a herd once infected remains infected. Carrier pigs harbour A. pleuropneumoniae in their nasal cavities, in their tonsils, or within lung lesions. A dose-defined nose-only aerosol infection model for pigs was used to study the immunogenic and **protective** potential of systemic immunization with ghosts made from A. pleuropneumoniae serotype 9 reference strain CVI 13261 against an homologous aerogenous challenge. Pigs were vaccinated twice intramuscularly with a dose of 5x109 CFU ghosts (GVPs) or formalin-inactivated A. pleuropneumoniae bacterins (BVPs). After 2 weeks vaccinated pigs and non-vaccinated placebo controls (PCs) were challenged with a dose of 109 CFU by aerosol. The **protective** efficacy of immunization was evaluated by clinical, bacteriological, serological and post-mortem examinations. Bronchoalveolar lavage in pigs was performed during the experiment to obtain lavage samples (BALF) for assessment of local antibodies. Isotype-specific antibody responses in serum and BALF were determined by ELISAs based on whole-cell **antigen**. Immunization with ghosts did not cause clinical side-effects. After aerosol challenge PCs developed fever and pleuropneumonia. GVPs or BVPs were found to be fully protected against clinical disease or lung lesions in both vaccination groups, whereas colonization of the respiratory tract with A. pleuropneumoniae was only prevented in GVPs. Specific immunoglobins against A. pleuropneumoniae were not detectable in BALF after immunization. A significant systemic increase of IgM, IgA, IgG(Fc'), or IgG(H+L) antibodies reactive with A. pleuropneumoniae was measured in GVPs and BVPs when compared to the non-exposed controls. BVPs reached higher titers of IgG(Fc') and IgG(H+L) than GVPs. However, prevention of carrier state in GVPs coincided with a significant increase of serum IgA when compared to BVPs. These results suggest that immunization with ghosts, that bias antibody populations specific to non-denaturated surface antigens, may be more efficacious in protecting pigs against colonization and infection than bacterins.
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L48 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2003 ACS
AN 1998:124035 CAPLUS
DN 128:191573
TI Cross-**protective** **equine** herpesvirus preparations and method of making and using the same
IN Macek, Joseph; Brown, Karen K.; Moore, Bobby O.
PA Bayer Corporation, USA
SO PCT Int. Appl., 26 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| PI WO 9806427 | A2 | 19980219 | WO 1997-US14840 | 19970805 |
| W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | | |
| AU 9748912 | A1 | 19980306 | AU 1997-48912 | 19970805 |
| AU 714418 | B2 | 20000106 | | |
| EP 929315 | A2 | 19990721 | EP 1997-911582 | 19970805 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, NL | | | | |
| BR 9711138 | A | 19990817 | BR 1997-11138 | 19970805 |
| CN 1228029 | A | 19990908 | CN 1997-197316 | 19970805 |
| NZ 334154 | A | 20000728 | NZ 1997-334154 | 19970805 |
| JP 2000516622 | T2 | 20001212 | JP 1998-510119 | 19970805 |
| EP 978286 | A1 | 20000209 | EP 1998-114863 | 19980807 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO | | | | |
| PRAI US 1996-698630 | A | 19960816 | | |
| WO 1997-US14840 | W | 19970805 | | |

AB Disclosed herein is an EHV-1 **vaccine** which provides protection against diseases assocd. with EHV-1 and EHV-4. The EHV-1 antigen is prepd. from **equine** dermal or kidney or fetal lung cell line, and is inactivated by .beta. propiolactone or formalin or binary ethylenimine. The **vaccine** compn. also comprises immune adjuvant (e.g. Havlogen, Carbopol 934P, Polygen, block copolymer, polymer, oil, aluminum salt, cytokine, immunomodulator, etc.) and stabilizer. The **vaccine** is useful for preventing **equine** abortion or respiratory disease e.g. **rhinopneumonitis**.

L51 ANSWER 3 OF 4 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V.
AN 75190077 EMBASE
DN 1975190077
TI The relation between the rabbit potency test and the response of sheep to sheep clostridial vaccines.
AU Frerichs G.N.; Gray A.K.
CS Cent. Veter. Lab., New Haw/Weybridge, United Kingdom
SO Research in Veterinary Science, (1975) 18/1 (70-75).
CODEN: RVTSA
DT Journal
FS 037 Drug Literature Index
004 Microbiology
LA English
AB Six commercially available clostridial vaccines comprising 1 oil emulsion, 2 alum precipitated and 3 aluminium hydroxide adjuvanted preparations, each containing between 2 and 7 antigenic components, were administered to groups of 10 rabbits and 8 sheep in accordance with manufacturers' recommendations. Serum antitoxic values to Cl welchii .beta., Cl welchi .epsilon., Cl septicum, Cl oedematiens and **Cl tetani** toxins were determined 14 days after completion of each vaccination course. The overall pattern of mean antitoxic values was found to be similar in sheep and rabbits, a vaccine eliciting a comparatively high antibody titer to any given **antigen** component in sheep also inducing a comparatively high titer in the corresponding group of rabbits. Similarly, comparatively poor responses in sheep were associated with poor responses in rabbits. The degree of variation in response within groups of animals was greater in sheep than in rabbits for all 5 antigenic components assayed. Sheep consistently developed higher titers than rabbits to Cl oedematiens component but consistently lower titers to both Cl welchii .beta. and .epsilon. components irrespective of the type of vaccine used. The response of both species to **Cl tetani antigen** was similar in terms of serum antitoxic values. It was concluded that rabbits provide a suitable model for the assessment of potency of sheep clostridial vaccines.

L59 ANSWER 24 OF 26 MEDLINE DUPLICATE 10
AN 86200399 MEDLINE
DN 86200399 PubMed ID: 3754590
TI **Protection** against **canine distemper** virus in dogs after immunization with isolated fusion protein.
AU Norrby E; Utter G; Orvell C; Appel M J
SO JOURNAL OF VIROLOGY, (1986 May) 58 (2) 536-41.
Journal code: 0113724. ISSN: 0022-538X.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 198605
ED Entered STN: 19900321
Last Updated on STN: 19970203
Entered Medline: 19860527
AB **Canine distemper** virus attachment (hemagglutinin [H] equivalent) and fusion (F) antigens were purified by affinity chromatography with monoclonal antibodies. The purified antigens were used to immunize groups of three dogs. Radioimmune precipitation assays with sera from these animals showed that the F **antigen** preparation was pure and induced only an F polypeptide-specific antibody response but that the H **antigen** preparation had a slight contamination by the F **antigen**. Immunized animals were challenged with virulent **canine distemper** virus. Two animals in each group developed pronounced humoral and cellular immune responses after challenge. Among these infected animals, only the dogs immunized with H **antigen** developed symptoms, albeit mild. In contrast, three nonimmunized control animals developed severe disease, with a fatal outcome in two cases. The complete resistance against challenge in two dogs was interpreted to reflect in one case anti-F immunity and in the other case most likely a high level of anti-H immunity. It is suggested that the F **antigen** may be of particular interest for the development of morbillivirus and possibly other paramyxovirus subunit or synthetic vaccines, because it can induce immunity capable of blocking virus infection and in situations of virus replication prevent the emergence of symptoms.

L59 ANSWER 25 OF 26 MEDLINE DUPLICATE 11

L64 ANSWER 3 OF 7 BIOTECHDS COPYRIGHT 2003 THOMSON DERWENT AND ISI
AN 1993-03824 BIOTECHDS
TI Dog distemper **virus vaccine;**
comprises immunogen from **virus**-infected CCL-64 mink lung CCL-64 cell culture in serum-free culture medium
PA Parhelion
PI US 5178862 12 Jan 1993
AI US 1989-444545 1 Dec 1989
PRAI US 1989-444525 1 Dec 1989
DT Patent
LA English
OS WPI: 1993-044797 [05]
AB Vaccines against **canine** distemper **virus** (CDV) comprise CDV immunogens isolated from CDV-infected cells cultured in vitro, and an adjuvant. The immunogens are obtained by culturing CDV-infected CCL-64 mink lung cells (ATCC CRL 9891) in a serum-containing culture medium, transferring the cells to a serum-free culture medium, freeze-thawing the culture supernatant, and inactivating any residual **virus** with 1 mM binary ethylene imine at 4 deg. The adjuvant in a oil-in-water, Al(OH)3, Quil A, dimethyldioctadecyl ammonium bromide, TDA-squalene, lecithin, alum and/or saponin. Unlike live or modified live vaccines, the present **virus**-free vaccines do not produce CDV carriers and can be combined with other vaccines, e.g. against parvo **virus, corno virus,** adeno **virus** and parainfluenza **virus**. (7pp)

L73 ANSWER 6 OF 58 MEDLINE
AN 97354709 MEDLINE
DN 97354709 PubMed ID: 9210936
TI Identification and production of **pestivirus** proteins for diagnostic and **vaccination** purposes.
AU Lecomte C; Vandenbergh D; Vanderheijden N; De Moerlooze L; Pin J J; Chappuis G; Desmettre P; Renard A
CS Eurogentec Campus du Sart Tilman Liege, Belgium.
SO ARCHIVES OF VIROLOGY. SUPPLEMENTUM, (1991) 3 149-56.
Journal code: 9214275. ISSN: 0939-1983.
CY Austria
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199707
ED Entered STN: 19970805
Last Updated on STN: 19970805
Entered Medline: 19970724
AB Using a panel of monoclonal antibodies (MAbs) previously characterized by seroneutralization, immunofluorescence and radioimmunoprecipitation, we have identified **Pestivirus** proteins useful for diagnostic purposes from the cytopathic Osloss isolate of bovine viral diarrhea virus (BVDV). Proteins that should be useful for **vaccination** have also been analysed. Cell-free translation of RNA from glycoprotein-coding cDNA fragments produced, when synthesized in the presence of canine pancreatic microsomes, two glycosylated proteins that were independently recognized and immunoprecipitated by two distinct classes of neutralizing MAbs. A similar in vitro procedure was carried out on nonstructural protein-coding sequences and allowed to identify a viral translation product that specifically reacted with MAbs directed against the 80 kDA protein of a number of **Pestivirus** strains. Its positioning within the polyprotein encoded by the viral genome was refined by epitope scanning using synthetic hexameric peptides. This viral **antigen** was further expressed in E. coli, produced as inclusion bodies and used successfully as an ELISA **antigen** in both competitive and indirect assays for the detection of BVD antibodies in cattle sera.

L73 ANSWER 2 OF 58 MEDLINE
AN 2001092240 MEDLINE
DN 20564807 PubMed ID: 11112498
TI Recombinant bovine adenovirus type 3 expressing bovine viral diarrhea virus glycoprotein E2 induces an immune response in cotton rats.
AU Baxi M K; Deregt D; Robertson J; Babiuk L A; Schlapp T; Tikoo S K
CS Virology Group, Veterinary Infectious Disease Organization, Saskatoon, Saskatchewan, S7N 5E3, Canada.
SO VIROLOGY, (2000 Dec 5) 278 (1) 234-43.
Journal code: 0110674. ISSN: 0042-6822.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 200101
ED Entered STN: 20010322
Last Updated on STN: 20010322
Entered Medline: 20010125
AB Recombinant bovine adenovirus is being developed as a live vector for animal **vaccination** and for human gene therapy. In this study, two replication-competent bovine adenovirus 3 (BAV-3) recombinants (BAV331 and BAV338) expressing bovine viral diarrhea virus (BVDV) glycoprotein E2 in the early region 3 (E3) of BAV-3 were constructed. Recombinant BAV331 contains chemically synthesized E2 gene (nucleotides modified to remove internal cryptic splice sites) under the control of BAV-3 E3/major late promoter (MLP), while recombinant BAV338 contains original E2 gene under the control of human cytomegalovirus immediate early promoter. Since E2, a class I membrane glycoprotein, does not contain its own signal peptide sequence at the 5' end, the bovine herpesvirus 1 (BHV-1) glycoprotein D signal sequence was fused in frame to the E2 open reading frame (ORF) for proper processing of the E2 glycoprotein in both the recombinant viruses. Recombinant E2 protein expressed by BAV331 and BAV338 recombinant viruses was recognized by E2-specific monoclonal antibodies as a 53-kDa protein, which also formed dimer with an apparent molecular weight of 94 kDa. Insertion of an E2-expression cassette in the E3 region did not effect the replication of recombinant BAV-3s. Intranasal immunization of cotton rats with these recombinant viruses generated E2-specific IgA and IgG responses at the mucosal surfaces and in the serum. In summary, these results show that the **pestivirus** glycoprotein can be expressed efficiently by BAV-3. In addition, mucosal immunization with replication-competent recombinant bovine adenovirus 3 can induce a specific immune response against the expressed **antigen**.
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and against parasites, i.e., Trypanosoma cruzi, in mice.

L78 ANSWER 11 OF 16 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
AN 1989:437987 BIOSIS
DN BR37:82596
TI **PROTECTIVE VACCINE** AGAINST **FELINE LEUKEMIA VIRUS** USING A RECOMBINANT **ANTIGEN**.
AU KENSIL C R; BELTZ G A; HUNG C H; AUBERT A; MARCIANI D J
CS CAMBRIDGE BIOSCI. CORP., WORCESTER, MASS., USA.
SO MORISSET, R. A. (ED.). VE CONFERENCE INTERNATIONALE SUR LE SIDA: LE DEFI SCIENTIFIQUE ET SOCIAL; V INTERNATIONAL CONFERENCE ON AIDS: THE SCIENTIFIC AND SOCIAL CHALLENGE; MONTREAL, QUEBEC, CANADA, JUNE 4-9, 1989. 1262P. INTERNATIONAL DEVELOPMENT RESEARCH CENTRE: OTTAWA, ONTARIO, CANADA. ILLUS. PAPER. (1989) 0 (0), 542.
ISBN: 0-662-56670-X.
DT Conference
FS BR; OLD
LA English

L78 ANSWER 9 OF 16 MEDLINE DUPLICATE 5
AN 91281123 MEDLINE
DN 91281123 PubMed ID: 1647576
TI Genetically-engineered subunit **vaccine** against **feline leukaemia virus: protective** immune response in cats.
AU Marciani D J; Kensil C R; Beltz G A; Hung C H; Cronier J; Aubert A
CS Cambridge Biotech Corporation, Worcester, MA 10605.
SO VACCINE, (1991 Feb) 9 (2) 89-96.
Journal code: 8406899. ISSN: 0264-410X.
CY ENGLAND: United Kingdom
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199107
ED Entered STN: 19910818
Last Updated on STN: 19970203
Entered Medline: 19910730
AB A recombinant retroviral subunit **vaccine** has been developed that successfully protects cats from infectious **feline leukaemia virus** (FeLV) challenge. The **antigen** used is a non-glycosylated protein derived from the envelope glycoprotein of FeLV subgroup A, expressed in Escherichia coli. This recombinant protein, rgp70D, includes the entire exterior envelope protein gp70, plus the first 34 amino acids from the transmembrane protein p15E. The **vaccine** consists of purified rgp70D absorbed on to aluminium hydroxide and used in conjunction with a novel saponin adjuvant. Cats immunized with this formulation developed a strong humoral immune response, including neutralizing and feline oncornavirus-associated cell membrane **antigen** antibodies. Vaccinated animals showed an anamnestic response upon intraperitoneal challenge with FeLV-A, and were protected from viral infection. In contrast, the control animals developed viraemia shortly after the challenge, which in most cases became chronic. Formulation of the same **antigen** with other widely used adjuvants elicited poor **protective** immune responses in cats.

(36pp)

L82 ANSWER 8 OF 27 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V.
AN 96124404 EMBASE
DN 1996124404
TI Raccoon poxvirus **feline panleukopenia virus** VP2 recombinant protects cats against FPV challenge.
AU Hu L.; Esposito J.J.; Scott F.W.
CS Cornell Feline Health Center, Dept. of Microbiology/Immunology, Cornell University Ithaca,Ithaca, NY 14853, United States
SO Virology, (1996) 218/1 (248-252).
ISSN: 0042-6822 CODEN: VIRLAX
CY United States
DT Journal; Article
FS 004 Microbiology
026 Immunology, Serology and Transplantation
037 Drug Literature Index
LA English
SL English
AB An infectious raccoon poxvirus (RCNV) was used to express the **feline panleukopenia virus** (FPV) open reading frame VP2. The recombinant, RCNV/FPV, was constructed by homologous recombination with a chimeric plasmid for inserting the expression cassette into the thymidine kinase (TK) locus of RCNV. Expression of the VP2 DNA was regulated by the vaccinia virus late promoter P11. Southern blot and polymerase chain reaction (PCR) analyses confirmed the cassette was in the TK gene of the RCNV genome. An immunofluorescent antibody assay using **feline** anti-FPV polyclonal serum showed the expressed viral **antigen** in the cytoplasm of infected cells. Radioimmunoprecipitation with the same antiserum detected a 67-kDa VP2 protein which exactly matched the migration of the authentic FPV VP2 protein by SDS-polyacrylamide gel electrophoresis. Nine five-month-old cats were vaccinated and 21 days later were boosted with the recombinant virus. Peroral FPV challenge 2 weeks after the booster showed that the cats were fully protected as measured by examining clinical signs and total white blood cell counts in peripheral blood. Cats not immunized developed low to very low leukocyte counts following peroral FPV challenge. The nine vaccinated cats showed high FPV neutralization antibody prior to challenge, whereas nonvaccinated cats formed anti-FPV antibodies only after challenge.

L102 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2003 ACS
AN 1994:321355 CAPLUS
DN 120:321355
TI Vector vaccines based on **feline** herpesvirus
IN Sondermeijer, Paulus Jacobus Antonius; Willemse, Martha Jacoba
PA AKZO N. V., Neth.
SO PCT Int. Appl., 56 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|---|
| PI | WO 9403621 | A1 | 19940217 | WO 1993-EP1971 | 19930723 |
| | W: AU, CA, HU, JP, NZ, US | | | | |
| | RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| | AU 9347022 | A1 | 19940303 | AU 1993-47022 | 19930723 |
| | EP 606452 | A1 | 19940720 | EP 1993-917639 | 19930723 |
| | EP 606452 | B1 | 20021113 | | |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE | | | | |
| | JP 06511392 | T2 | 19941222 | JP 1993-504958 | 19930723 |
| | AT 227775 | E | 20021115 | AT 1993-917639 | 19930723 |
| | US 6521236 | B1 | 20030218 | US 1995-504617 | 19950720 |
| PRAI | EP 1992-202365 | A | 19920730 | | |
| | WO 1993-EP1971 | W | 19930723 | | |
| | US 1994-211150 | B1 | 19940322 | | |

AB **Feline** herpesvirus (FHV) with an expression cassette for a heterologous gene introduced into a section of the FHV genome are constructed for use as vector vaccines for cats. The **vaccine** raises immunity to FHV and to the **antigen** encoded by the heterologous gene. A .beta.-galacotosidase gene was introduced into the unique short site of the genome of the **vaccine** strain G2620 by in vivo recombination. Specific pathogen-free cats innoculated with one of these viruses (105 TCID50) showed weaker clin. signs post-vaccination than did those innoculated with G2620 (1.7 vs. 7.0). The clin. score of animals challenged with 105 TCID50 of the SGE strain was 12.0 for the novel **virus**, 5.5 for G2620, and 79.7 for control animals.

L102 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2003 ACS
AN 1997:457171 CAPLUS
DN 127:80165
TI **Feline** herpes **virus** type 1-based expression vectors for use in vaccines against **feline** infectious **peritonitis**
IN Audonnet, Jean-Christophe Francis; Baudu, Philippe Guy Nicolas; Riviere, Michel Albert Emile
PA Rhone Merieux, Fr.; Audonnet, Jean-Christophe Francis; Baudu, Philippe Guy Nicolas; Riviere, Michel Albert Emile
SO PCT Int. Appl., 60 pp.
CODEN: PIXXD2
DT Patent
LA French
FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|---|
| PI | WO 9720059 | A1 | 19970605 | WO 1996-FR1830 | 19961119 |
| | W: AU, BR, CA, JP, NZ, US | | | | |
| | RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| | FR 2741806 | A1 | 19970606 | FR 1995-14450 | 19951130 |
| | FR 2741806 | B1 | 19980220 | | |
| | CA 2239072 | AA | 19970605 | CA 1996-2239072 | 19961119 |
| | AU 9676301 | A1 | 19970619 | AU 1996-76301 | 19961119 |
| | AU 725846 | B2 | 20001019 | | |
| | EP 870046 | A1 | 19981014 | EP 1996-939150 | 19961119 |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, NL, SE, PT, IE | | | | |
| | BR 9611845 | A | 19990309 | BR 1996-11845 | 19961119 |
| | JP 2000501927 | T2 | 20000222 | JP 1997-520224 | 19961119 |
| | NZ 322526 | A | 20000728 | NZ 1996-322526 | 19961119 |
| | ZA 9609951 | A | 19980527 | ZA 1996-9951 | 19961127 |
| | US 6074649 | A | 20000613 | US 1998-80044 | 19980515 |
| | US 6387376 | B1 | 20020514 | US 2000-531857 | 20000321 |
| PRAI | FR 1995-14450 | A | 19951130 | | |
| | WO 1996-1830 | A1 | 19961119 | | |
| | WO 1996-FR1830 | W | 19961119 | | |
| | US 1998-80044 | A3 | 19980515 | | |

AB **Feline** herpes **virus** 1 (FHV-1) expression vectors for use in vaccines have the gene for the **protective antigen** inserted into sites in open reading frames ORF5 or ORF2. Multivalent vaccines using these constructs are described. Extended sequences from FHV-1 are also reported. The M, S (spike protein), and N genes of **feline** infectious **peritonitis virus** were placed under control of the human cytomegalovirus immediate-early promoter and introduced into FHV-1 by in vivo recombination.

L106 ANSWER 8 OF 9 BIOTECHDS COPYRIGHT 2003 THOMSON DERWENT AND ISI
AN 1994-04432 BIOTECHDS
TI **Feline** herpes virus mutant containing a foreign gene in the FHV genome;
cat herpes virus mutant expressing cat leukemia virus, FIV virus, cat **calici virus**, cat parvo virus, cat corona virus or cat Chlamydia **antigen**; viral rhinotracheitis recombinant **vaccine**
PA Akzo
PI WO 9403621 17 Feb 1994
AI WO 1993-EP1971 23 Jul 1993
PRAI EP 1992-202365 30 Jul 1992
DT Patent
LA English
OS WPI: 1994-065709 [08]
AB A cat herpes virus (FHV) containing an insertion mutation in part (I) of the FHV genome (restriction map disclosed) spanning the upstream non-coding region of open reading frame (ORF)-1 to the downstream non-coding region of ORF-6 is claimed. (I) (DNA sequence disclosed) encodes specific proteins, whose protein sequences are disclosed, or their variants. Preferably the mutation is insertion of a foreign DNA sequence encoding a cat pathogen (cat leukemia virus, FIV virus, cat **calici virus**, cat parvo virus, cat corona virus or cat Chlamydia) **antigen**. The insertion may be at a deleted part of the FHV genome. Also claimed are: (1) a nucleic acid sequence comprising the foreign DNA insert flanked by DNA sequences derived from the FHV genome; (2) the DNA sequence of (I); (3) a host cell transfected with (I); (4) a cell culture infected with an FHV mutant; (5) a recombinant **vaccine** comprising an FHV mutant; and (6) a method for immunization of animals against an infectious disease involving administering the **vaccine** of (5). (55pp)

L106 ANSWER 6 OF 9 BIOTECHDS COPYRIGHT 2003 THOMSON DERWENT AND ISI
AN 1997-08971 BIOTECHDS
TI Live recombinant **vaccine** based on **feline** herpes virus with **antigen**-encoding sequence inserted;
cat infectious-peritonitis virus, cat leukemia virus, FIV virus, cat infectious-panleucopaenia virus or **calici virus** recombinant **antigen** gene cloning in cat herpes virus vector
AU Audonnet J C F; Baudu P G N; Riviere M A E
PA Rhone-Merieux
LO Lyon, France.
PI WO 9720059 5 Jun 1997
AI WO 1996-FR1830 19 Nov 1996
PRAI FR 1995-14450 30 Nov 1995
DT Patent
LA French
OS WPI: 1997-310613 [28]
AB A live recombinant **vaccine** (I) comprises as a vector a cat herpes virus (FHV) type 1 containing at least 1 sequence (II) encoding a protein inserted into the open reading frames (ORF) 5 and/or 2. Also new are: multivalent vaccines containing at least 2 (I) containing different (II); and a 8,193 bp DNA fragment of FHV-1 CO (reproduced with the peptide sequences encoded by ORF 1-8) and parts of it. (I) and the polyvalent vaccines are used to protect cats, specifically against cat infectious-peritonitis virus (FIPV). (I) is attenuated but retains a good capacity to replicate in vivo and still protects against infectious-rhinotracheitis virus (caused by FHV). Vaccines are administered by the oronasal route, once at a dose of 100-10 million DICC50. (II) is inserted into ORF 5 or ORF 2 either directly or after deletion of (part of) the ORF. (II), which is an **antigen** from a cat pathogen, especially FIPV, leukemia virus, FIV virus, infectious panleucopaenia virus or a calci virus is expressed under the control of a strong prokaryotic promoter, particularly the human or mouse cytomegalo virus immediate early promoter. (60pp)

L117 ANSWER 4 OF 6 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
AN 2001:262417 BIOSIS
DN PREV200100262417
TI **Avian** recombinant live **vaccine** using, as vector, the **avian** infectious laryngotracheitis virus.
AU Audonnet, Jean-Christophe (1); Bublot, Michel; Riviere, Michel
CS (1) Lyons France
ASSIGNEE: Merial, Lyons, France
PI US 6153199 November 28, 2000
SO Official Gazette of the United States Patent and Trademark Office Patents, (Nov. 28, 2000) Vol. 1240, No. 4, pp. No Pagination. e-file. ISSN: 0098-1133.
DT Patent
LA English
AB The living recombinant **avian vaccine** comprises, as a vector, an ILTV virus comprising and expressing at least one heterologous nucleotide sequence, this nucleotide sequence being inserted in the insertion locus defined between the nucleotides 1624 and 3606 at the SEQ ID NO: 5. The **vaccine** may in particular comprise a sequence coding for an antigen of an **avian** pathogenic agent selected among the group consisting of the Newcastle disease virus (NDV), the infections bursal virus (IBDV), the Marek disease virus (MDV), the infectious bronchitis virus (IBV), the chicken **anaemia virus** (CAV), thee chicken pneumovirosis virus, preferably under the control of a strong eukariotic promoter. A multivalent **vaccine** formula is also disclosed.